

HRD Viewpoints: Book Review

The Rise of the Robots: Technology and the Threat of Mass Unemployment *Martin Ford*

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The central thesis of Ford's book is that accelerating technology will 'disrupt', radically and fundamentally, global employment and the nature of work. Of course predictions of a jobless future are not new. However, Ford argues that we are approaching a critical 'tipping point'; one that is poised to make the world economy significantly less labour intensive. It is not simply routine jobs that are most threatened by technology; more accurately it is 'predictable' jobs. Computers, argues Ford, are becoming highly proficient at acquiring skills, especially where a large amount of training data is available. Whether you are training to be an airline pilot, a retail assistant, a lawyer or a pharmacist, labour saving technology is whittling away the numbers ... and in some cases hugely so.

What makes the book particularly pertinent to the HRD reader are the implications for prevailing assumptions about education, training and skills. A view that education and skills will assure employers and employees of secure and prosperous futures is pervasive; driving HRD policy and practice across the globe. Ford counters this bluntly: "acquiring more education and skills will not necessarily offer protection against job automation in the future". There are echoes here of Brown and Hesketh's (2004) searing critique of employability in the so called knowledge economy. These authors explore what happens when the degree begins to lose its badge of distinction. Ford continues the analysis, maintaining that across a raft of occupations graduates have been forced into relatively unskilled jobs, often displacing non graduates in the process.

Interestingly, though, it is higher education, along with healthcare that appears more resistant to the dramatic changes evident elsewhere. Whilst Ford notes the rapid and inexorable rise in 'on line' provision in higher education, and which he argues is driving further developments in automated approaches to both teaching and marking, the employment impact, to date, has been minimal. One factor here is a "stumbling" of the MOOC (massive open online course) phenomena, where research highlights minimal engagement with negligible completion rates. Nonetheless, Ford is of the view that the influence of MOOCs will develop and will "slam into an industry" which generates huge revenue and indeed employs large numbers of highly educated workers. However, the analysis here is less than convincing. A key question seems to be whether MOOCs can mature into a major provider of marketable credentials (degrees and competency based qualifications); a question which Ford notes but largely sidesteps. He also doesn't deal adequately with shifting occupational roles in higher education; away from the classic role of 'deliverer' to that of content designer (for an on line audience) and student support (however this is provided). Healthcare, acknowledges Ford, represents an even greater "challenge for the

robots”. Whilst recent applications of artificial intelligence and robotics to the healthcare field are impressive their impact, in terms of the workforce and employment, remains marginal. ‘Big data’, he argues, will continue to have a transformational impact on how healthcare is delivered and managed but the net effect may only be to increase a demand for the ‘personal service’ aspects of medicine and healthcare.

Given these reservations Ford is clearly more comfortable defending his central arguments in the context of the lower end of the jobs hierarchy. An important part of his analysis is what is happening now as well as his predictions for the future. Ford provides a compelling illustration, for example, of the capability of robots to ‘shelf pick’, irrespective of the size and shape of the items. So why are staff at Amazon’s warehouses (paradoxically named fulfilment centres) still scurrying around with their hand held computers to pick the day’s orders? MacDonald’s by the end of the 1990s had developed fully automated processes to make and serve a Big Mac. So why do we still find workers in MacDonald’s flipping burgers? Ford is no economist but he makes a fair stab at arguing that the impact of accelerating technology is *already* evident in the large numbers of relatively unskilled, low paid jobs within the workforces of the likes of MacDonald’s and Amazon. His argument is that that the nature of work is being impacted hugely by automation. It persists because for the time being it remains a rational business decision but will not persist indefinitely. The technology and the relative cost of the technology “will develop to the point where low wages no longer outweigh the benefits of further automation”.

Ford’s focus is the developed economies of the world and in particular his statistics and evidence are largely drawn from the US and the UK. As a result, only passing reference is made to developing economies. This is disappointing. It befitted such a text to consider the impact of the ‘rise of the robots’ in, say, Africa. Sub Saharan African countries already have unemployment rates above 20%. Young people, increasingly educated, are particularly hard hit. Huajian, one of China’s largest manufacturers of shoes opened a factory in Ethiopia in 2012, largely because of the availability of cheap labour. Its workforce is 3,500, including a not insignificant number of graduates, but where the work is largely unskilled, routinized and Taylorist. Where exactly does such a scenario fit in Ford’s analysis? And how do we interpret such a scenario? To what extent do we bemoan the quality of working life evident in the factory or applaud the investment as provision of waged labour in a state struggling with chronic unemployment? And, critically, for how much longer does such a proposition make economic sense even for the Chinese, when very soon the robots will be able to make the shoes more quickly and more cheaply?

There is no chapter on the ‘implications for HRD’ as such but implicitly the questions for the HRD profession are on every page. Whether or not the more dystopian predictions of Ford, in terms of mass unemployment, prove to be correct is largely irrelevant. Economists may quibble at the finer points of his analysis, but that technology is having an accelerating impact upon the economics of labour and the nature of work is inescapable. What do we (in HRD) do? React to Ford’s book with a grim shake of the head but get on with business as usual? A good place to start is surely to jettison our fixation with the ‘high road’ of HRD and the view that herein lie the main challenges facing HRD. We need to begin raising the awkward questions about HRD’s relationship with job market polarization and the future of work and to consider HRD’s role in a world where the mantra of “in education and skills we trust” may become increasingly tenuous — at least in terms of a route to fulfilling work and career. Ford’s book needs to be widely read by professionals working in HRD. If, as a result, the challenges facing HRD begin to be re-considered and re-configured Ford’s book will have been a contribution of some significance.